

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,574	10/09/2001	Michael Waring	A33882-007220.0135	6030
21003	7590 09/03/2004		EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA		WILKINS III, HARRY D		
NEW YORK, NY 10112			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		
	09/973,574	WARING ET AL.	WARING ET AL.	
Office Action Summary	Examiner	Art Unit		
	Harry D Wilkins, III	1742		
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet wi	th the correspondence address		
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication If the period for reply specified above is less than thirty (30) days, a relif NO period for reply is specified above, the maximum statutory perions - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).	1.136(a). In no event, however, may a reply within the statutory minimum of third by will apply and will expire SIX (6) MON ute, cause the application to become AB	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).		
Status				
1) Responsive to communication(s) filed on 13	<u>May 2004</u> .			
2a) This action is FINAL . 2b) ⊠ Th	nis action is non-final.	•		
3) Since this application is in condition for allow closed in accordance with the practice under		•		
Disposition of Claims				
4) ☐ Claim(s) 1,2,4,8-13 and 15 is/are pending in 4a) Of the above claim(s) is/are withdrest 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1,2,4,8-13 and 15 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.			
Application Papers				
9) The specification is objected to by the Examin				
10) ☐ The drawing(s) filed on <u>05 February 2002</u> is/a				
Applicant may not request that any objection to the		• •		
Replacement drawing sheet(s) including the corre		•		
Priority under 35 U.S.C. § 119				
a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bure * See the attached detailed Office action for a list	nts have been received. nts have been received in Ap fority documents have been au (PCT Rule 17.2(a)).	oplication No received in this National Stage		
Attachment(s)				
Notice of References Cited (PTO-892)	4) Interview St			
 Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 		/Mail Date formal Patent Application (PTO-152) 		

Art Unit: 1742

DETAILED ACTION

1. The objection to claim 5 has been withdrawn in view of the cancellation of that claim.

- 2. The grounds of rejection based on Vega et al presented in the previous office action have been withdrawn in view of Applicant's amendment of claim 1.
- 3. The grounds of rejection based on Mnich presented in the previous office action have been withdrawn in view of Applicant's remarks regarding the negative teaching against using Cr in Mnich.
- 4. New grounds of rejection are presented herein.

Claim Objections

5. Claims 11 and 12 are objected to because of the following informalities: based upon the specification, in reference to the second embodiment, the sixth solution contains nitric acid and is at a pH of 1.0-3.0, not the third solution (see paragraph 46). Thus, examination will be based upon the disclosure of the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 09/973,574

Art Unit: 1742

- 7. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 8. Claims 1, 2, 4, 8-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradley et al (US 4,310,390) in view of Hartman et al (US 3,053,691) and Stadler et al (US 5,750,014).

Bradley et al teach (see col. 1, lines 9-28, col. 3, lines 50-63 and the paragraph spanning cols. 4 and 5) a method of anodizing aluminum including alkaline cleaning, deoxidizing (inherently with a deoxidizer), anodizing with sulfuric acid and sealing with a solution including sodium dichromate.

Bradley et al do not teach that the sealing solution including sodium dichromate has a pH of 1.0 to 3.0.

However, Bradley et al teach (see col. 1, lines 9-28) that the invention is an improvement over the prior art process which used a separate sealing and coating step. Thus, Bradley et al performs two steps simultaneously, sealing and coating, that the prior art had performed separately, for the purpose of reducing labor involved with moving the aluminum object from one reaction tank to another.

Application/Control Number: 09/973,574

Art Unit: 1742

Hartman et al teach (see col. 1, lines 15-54) the prior art process of treating with a chemical conversion coating (sealing) by treatment with sodium dichromate (col 2, lines 58-62) which has a pH of 1-3 (col. 3, lines 7-16) that is controlled by additions of nitric acid.

However, Bradley et al and Hartman et al do not teach supplying each solution from a separate storage tank and removing each solution form the process tank and putting it in a transition tank.

Stadler et al teach (see Fig.1, numerals 32, 34, 36 and 38, "To waste treatment" and abstract) an aluminum anodizing process where each solution is supplied from a storage tank and removing each solution from the process tank and putting it in a transition tank. Stadler et al teach (see cols. 4 and 5) that the single process chamber minimized movement of the articles to be treated (inherently decreasing labor considerations.

Therefore, it would have been obvious to one of ordinary skill in the art to have used the single process chamber with multiple feed tanks as described by Stadler et al for the process of Bradley et al because the single process chamber reduces the amount of labor involved in the anodizing process.

Ensuing from this, one of ordinary skill in the art would have been motivated to take the combined steps of Bradley et al and returned to the prior art separate steps as disclosed by Hartman et al because of the labor savings provided by using the process of Stadler et al. Thus, one of ordinary skill in the art would have used the sodium dichromate solution having a pH of 1.0-3.0 of

Application/Control Number: 09/973,574

Art Unit: 1742

Hartman et al, wherein the pH is controlled by adding nitric acid because it provides excellent corrosion resistance and paintablity.

Regarding claim 8, the coating step of Hartman et al would have been applied in combination with the sealing step as the sixth solution to be applied.

Regarding claims 11 and 12, the coating step uses a polyacrylamide acid solution that has a preferable pH of 1.0-3.0 with nitric acid used to control the pH (see col. 1, lines 15-54 and col. 3, lines 7-16).

Response to Arguments

9. Applicant's arguments with respect to claims 1, 2, 4, 8-13 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry D Wilkins, III whose telephone number is 571-272-1251. The examiner can normally be reached on M-Th 10:00am-8:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harry D Wilkins, III

Examiner

Art Unit 1742

hdw

ROY KING

SUPERVISORY PATENT EXAMINER

TECHNGLOGY CENTER 1700